



Mammography and Other Screening Tests for Breast Problems

What is a screening test?

A screening test is used to find conditions in people who do not have signs or symptoms. This allows early treatment.

Why is breast screening important?

In the United States, one in eight women will develop breast cancer by age 75 years. Regular breast screening can help find cancer at an early and more curable stage. Screening also can find problems in the breasts that are not cancer.

What is mammography?

Mammography is the primary tool used to screen for breast cancer and other problems. Mammography uses X-ray technology to view the breasts. The images created are called a mammogram. A physician called a radiologist reads the images.

Why is mammography done?

Mammography is done for two reasons: 1) as a screening test to check for breast cancer in women who do not have signs or symptoms of the disease, and 2) as a diagnostic test to check lumps or other symptoms that you have found yourself or that have been found by an obstetrician-gynecologist (ob-gyn) or other health care professional. This FAQ focuses on screening mammography.

How should I prepare for a mammogram?

The day of your test you should not wear powders, lotions, or deodorants. Most of these products have substances that can show on the X-ray. They can make your mammogram hard to interpret.

What happens during a mammogram?

You will need to completely undress from the waist up and put on a gown. You will be asked to stand in front of an X-ray machine. One of your breasts will be placed between two flat plastic plates. You will feel firm pressure on your breast. The plates will flatten your breast as much as possible so that the most amount of tissue can be viewed. These steps will be repeated to take a side view of the breast. The test then is done on the other breast.

Is it painful to get a mammogram?

The pressure of the plates often makes the breasts ache. This discomfort is brief. If you are still having menstrual periods, you may want to have the test done in the week right after your period. The breasts often are less tender after your period.

What do the results mean?

Radiologists use a system called BI-RADS to classify mammography results. Your screening mammogram result will be given a score. Scores range from 0 to 5 and mean the following:
0—More information is needed. You may need another mammogram before a score can be given.
1—Nothing abnormal is seen. You should continue to have routine screening.
2—Benign conditions, such as cysts, are seen. You should continue to have routine screening.

3—Something seen that probably is not cancer. Repeat mammogram should be done in 6 months.

4—Something is seen that is suspicious for cancer. You may need to have a biopsy.

5—Something is seen that is highly suggestive of cancer. You will need to have a biopsy.

My mammogram report mentions breast density. What is this?

Fibrous tissue and fat give breasts their shape. When breasts are dense, they have more fibrous tissue and less fat. Breast density is a normal and common finding on a mammogram, but breast density may make it harder for a radiologist to see cancer. If your report says you have dense breasts, your ob-gyn or other health care professional may discuss other screening tests in addition to mammography.

What does it mean to be at average risk of breast cancer?

A woman may be at high risk of breast cancer if she has certain risk factors. These risk factors include a family history of breast cancer, ovarian cancer, or other inherited types of cancer; BRCA1 and BRCA2 mutations; chest radiation treatments at a young age; and a history of high-risk breast biopsy results. Women without these risk factors are at average risk.

When should I start having screening mammography?

For women at average risk of breast cancer, screening mammography is recommended every 1–2 years beginning at age 40 years. If you have not started screening in your 40s, you should start having mammography no later than age 50. Screening should continue until at least age 75 years.

How accurate is screening mammography?

Like other screening tests, mammography is not perfect. Mammography may miss cancer even when it is present. If results do not show cancer but you do in fact have cancer, it is called a false-negative result. False-negative results can lead to delays in treatment.

Mammography also may show something that is thought to be cancer, but when results of follow-up tests are read, they show that you do not have cancer. This is called a false-positive result. Follow-up testing can be inconvenient and uncomfortable, and it can cause anxiety.

How is a clinical breast exam done?

Your ob-gyn or other health care professional may examine your breasts during routine checkups. This is called a clinical breast exam. The exam may be done while you are lying down or sitting up. The breasts are checked for any changes in size or shape, puckers, dimples, or redness of the skin. Your ob-gyn/other health care professional may feel for changes in each breast & under each arm.

How often should I have a clinical breast exam?

For women who are at average risk of breast cancer and who do not have symptoms, the following are suggested:

- Clinical breast exam every 1–3 years for women aged 25–39 years
- Clinical breast exam every year for women aged 40 years and older

What is breast self-awareness?

Breast self-awareness focuses on having a sense of what is normal for your breasts so you can tell if there are changes—even small changes—and report them to your ob-gyn/health care professional.

Why is breast self-awareness important?

Breast cancer often is found by a woman herself. This happens in almost one half of all cases of breast cancer in women aged 50 years and older. In women younger than 50 years, more than 70% of cases of breast cancer are found by the women themselves.

How can I talk with my doctor about mammography and breast health?

If you are aged 40 years or older, you can start the conversation with these questions:

- What are my chances of having breast cancer?
- When should I start getting regular mammograms?
- How often should I get them?

You can ask more specific questions based on your age. If you are aged 40–49 years:

- What are the pros and cons of getting mammograms before I turn 50?

If you are aged 50–75 years:

- What are the pros and cons of getting mammograms every 2 years instead of every year?

If you are older than 75 years:

- Do I need to keep having mammograms?

You and your ob–gyn or other health care professional should share information, talk about your wishes, and agree on when and how often you will have breast screening.

Glossary

Benign: Not cancer.

Biopsy: A minor surgical procedure to remove a small piece of tissue that is then examined under a microscope in a laboratory.

BRCA1 and BRCA2: Genes that function in the control of cell growth. Changes in these genes have been linked to an increased risk of breast cancer and ovarian cancer.

Cysts: Sacs or pouches filled with fluid.

Mammography: A procedure in which X–rays of the breast are used to detect breast cancer.

Mammogram: An imaging technique in which X–rays of the breast are used to detect breast cancer. The image that is created is called a mammogram.

Mutations: Permanent changes in genes that can be passed from parent to child.

Obstetrician–Gynecologist (Ob–Gyn): A physician with special skills, training, and education in women’s health.

If you have further questions, contact your obstetrician–gynecologist.

FAQ178: Designed as an aid to patients, this document sets forth current information and opinions related to women’s health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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See <https://www.acog.org/Patients/FAQs/Mammography-and-Other-Screening-Tests-for-Breast-Problems>

About Breast Self-Awareness, the **CDC** states “Being familiar with how your breasts look and feel can help you notice symptoms such as lumps, pain, or changes in size that may be of concern. These could include changes found during a *breast self-exam*.” https://www.cdc.gov/cancer/breast/basic_info/screening.htm

Breast Self-Examination Info by the MO Department of Health

<http://health.mo.gov/living/healthcondiseases/chronic/showmehealthywomen/pdf/BSEbrochure.pdf>

Look for changes in front of a mirror

View front and each side in each of the 3 standing positions:

1. Relax arms at your sides. Look for changes in shape and color. View for puckering, dimpling, skin changes, nipple discharge.
 2. Raise hands above your head. Check again for puckering, dimpling and skin changes.
 3. Place hands on hips, press down, bend forward. Check nipple direction and general appearance.
- Feel for changes lying down.

Remember the Seven “Ps!”

Palpation – Use the pads of the middle three fingers of each hand to examine the breast on the opposite side – do not use fingertips – keep fingers together. Move fingers in dime-size circles using the three levels of pressure in each spot. Keep fingers, knuckles, and wrists straight.

“Walk and slide” finger pads along so no breast tissue is missed.

Pressure – Lumps can occur at any depth. Use 3 levels of pressure to examine each spot thoroughly.

- Light – Use very light pressure on the first dime-size circle. Pressure should be just enough to move the skin without disturbing the tissue underneath. Pressing too hard at first could cause a lump to move out of the way.
- Medium – On the second circle, use medium pressure to feel for changes below the surface to mid-level of the breast tissue.
- Deep – On the third circle, check for lumps deep in the breast tissue. Press as firmly as you can without discomfort. The goal is to feel the ribs with the deep pressure.

Pattern – Use a vertical strip pattern to check the entire breast area. Imagine mowing a lawn with straight, vertical, overlapping rows. When you reach the end of each row, move over about one finger width and start the next row. Once you start, do not lift fingers from the breast area. Be sure to examine the nipple with the same palpation technique you use to examine the rest of the breast tissue.

Perimeter – The area to be examined include sides, top and bottom of breast. Sides include the line from the middle of arm pit (axilla), that includes the area beyond breast fullness, down to the bottom bra line and over to the middle of the breast bone. The top starts two finger-widths above the collarbone. Two finger-widths below the bra line indicates the bottom of the breast.

Position – Lying down Position 1: Spread the breast tissue evenly over rib cage. Turn on your side with knees bent. Lean shoulder back toward the outside (away from your hip) and put your hand on your forehead. Place a pillow under your lower back to make it more comfortable. You are in the right position when your nipple seems to “float” at the top of the mound of your breast tissue. Lying down Position 2: When search pattern reaches the nipple, hold fingers in place on the nipple and roll back into a position flat on your back. The arm on the side being examined should now be extended directly away from the body (at a right angle).

Pace – Go slowly. Take your time. Cover every square inch of the breast tissue. Performing breast self-exam every month could potentially save your life.

Practice – With monthly practice, you can become skilled at looking and feeling for changes in your breasts.